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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,497	01/11/2002	Michael Anthony Pugel	PU010223	9185

7590 03/22/2007
JOSEPH S. TRIPOLI
THOMSON MULTIMEDIA LICENSING INC.
2 INDEPENDENCE WAY
P.O. BOX 5312
PRINCETON, NJ 08543-5312

EXAMINER

YIMAM, HARUN M

ART UNIT	PAPER NUMBER
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/043,497

Applicant(s)

PUGEL ET AL.

Examiner

Harun M. Yimam

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION:

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/17/2007 has been entered.

Response to Arguments

2. Applicant's arguments filed 01/17/2007 with respect to claims 1-10 have been fully considered but are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 4 and 6 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US 6,804,262) in view of Stockill (US 5,359,367).

Considering claim 1, Vogel discloses in a multi-mode bi-directional communications (downstream and upstream communication—column 5, lines 30-55 and column 6, lines 40-64), an apparatus (cable modem—22 in figure 3) for processing received downstream data (column 5, lines 53-55) comprising: a tuner (108 in figure 3 and column 9, lines 34-42); a demodulator (114 in figure 3, column 5, lines 53-55 and column 10, lines 17-25); a first filter (112 in figure 3 and column 9, lines 48-51) adapted for selective coupling between the tuner and the demodulator (column 9, lines 55-60) to provide a filtered output thereof to the demodulator for demodulation (column 9, line 43 – column 10, line 16); and a second filter (116 in figure 3) adapted for selective coupling between the tuner and the demodulator (column 9, lines 55-60).

Vogel fails to explicitly disclose that the second filter, like the first, provides a filtered output to the demodulator for demodulation.

In analogous art, Stockill discloses three filters (filters 66a, 66b and 66c in figure 4) connected in parallel (column 4, lines 3-5 and figure 4) wherein all three filters are adapted for selective coupling between a tuner (30 in figure 3) and a demodulator (32 in figure 3, which incorporates DEMOD box 70 in figure 4) to provide a filtered output to the demodulator for demodulation (column 4, lines 3-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Vogel's system to include that said second filter provides a filtered output to the demodulator for demodulation, as taught by Stockill, for the benefit of having one system that suits the frequency bandwidth characteristics of the UK, European as well as US broadcasting standards (column 4, lines 3-45).

As for claim 2, both Vogel and Stockill disclose that the first filter has a bandwidth of 6 MHz (Vogel—column 9, lines 45-51) (Stockill—column 4, lines 11-13).

With regards to claim 3, it is met by the combination of Vogel and Stockill. In particular, Stockill discloses that the second filter has a bandwidth of 8 MHz (Stockill—column 4, lines 8-10).

Regarding claim 4, it is met by the combination of Vogel and Stockill. In particular, Vogel discloses a selector for selectively coupling the first filter and the second filter between the tuner and the demodulator (Vogel—110 in figure 3 and column 9, line 43 – column 10, line 25).

Considering claim 6, it is met by the combination of Vogel and Stockill. In particular, Vogel discloses that the downstream data is filtered to pass a data signal modulation frequency of greater than 88 MHz to the tuner (column 6, lines 25-39).

With regards to claim 7, it is met by the combination of Vogel and Stockill. In particular, Vogel discloses that the multi-mode bi-directional communications device is a cable modem (22 in figure 3, column 5, lines 53-55 and column 8, lines 36-59).

Regarding claim 8, it is met by the combination of Vogel and Stockill. In particular, Stockill discloses that the apparatus supports multiple standards including the North American and the European DOCSIS standards (Stockill—column 4, lines 3-45).

Considering claim 9, it is met by the combination of Vogel and Stockill. In particular, Vogel discloses that the first filter (112 in figure 3) is a surface acoustic wave (SAW) filter (Vogel—column 9, lines 49-50).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US 6,804,262) in view of Stockill (US 5,359,367), as applied to claim 1 above, and further in view of Atokawa (US 6,308,051).

Considering claim 5, Vogel and Stockill disclose a selector comprising a switch for selectively coupling the first filter and the second filter between the tuner and the demodulator (Vogel—110 in figure 3 and column 9, line 43 – column 10, line 25) (Stockill—input selector 68 in figure 4 and column 4, lines 3-41). Furthermore, Stockill discloses that said input selector 68 is controlled by control logic 76 in figure 3.

However, Vogel and Stockill fail to explicitly disclose that the selector comprises a diode switch.

In analogous art, Atokawa discloses that the selector comprises a diode switch (D3 in figure 1 and column 5, lines 48-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Vogel and Stockill to include a selector comprising a diode switch, as taught by Atokawa, for the benefit of providing different forms of selectors.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vogel (US 6,804,262) in view of Stockill (US 5,359,367), as applied to claim 1 above, and further in view of Widmer (US 6,169,569).

As for claim 10, Vogel and Stockill disclose that the first filter (Vogel—112 in figure 3) is a surface acoustic wave (SAW) filter (Vogel—column 9, lines 49-50).

Vogel and Stockill fail to disclose that the second filter is a surface acoustic wave (SAW) filter.

In analogous art, Widmer discloses that the second filter is a surface acoustic wave (SAW) filter.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Vogel and Stockill to include that the second filter is a surface acoustic wave (SAW) filter, as taught by Widmer, for the benefit of providing significant advantages in performance, cost, and size over other filter technologies.

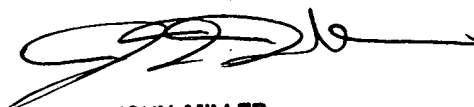
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harun M. Yimam whose telephone number is 571-272-7260. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HMY


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600